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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,106	08/14/2001	Stephen E. Jones	149148001US1	9880
25096	7590	04/20/2005	EXAMINER	
PERKINS COIE LLP			TSAI, HENRY	
PATENT-SEA				
P.O. BOX 1247			ART UNIT	PAPER NUMBER
SEATTLE, WA 98111-1247			2183	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/930,106	Applicant(s) JONES, STEPHEN E.	
	Examiner Henry W.H. Tsai	Art Unit 2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5/21/02</u> | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

at page 3, line 2, the meaning of abbreviation "RSM" should be indicated;

at page 3, line 15, the meaning of abbreviation "API" should be indicated;

at page 3, line 27, the meaning of abbreviation "CR0" should be indicated; and

at page 4, line 4, the meaning of abbreviation "BIOS" should be indicated.

Appropriate correction is required.

Claim Objections

2. Claims 1-4 are objected to because of the following informalities:

In claim 1, "[c1]" should be changed to -1.-;

In claim 2, "[c2]" should be changed to -2.-;

In claim 3, "[c3]" should be changed to -3.-; and

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In claim 4, "[c4]" should be changed to -4.-.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wooten (U.S. Patent No. 5,832,299) (hereafter referred to as Wooten'299).

Referring to claim 1, Wooten'299 discloses, as claimed, a method in a computer system for executing code during a system management mode interrupt (Virtual System Mode Interrupt, see Col. 15, lines 60-61); the method comprising: upon occurrence of a system management mode interrupt (Virtual System Mode Interrupt, see Col. 15, lines 60-61), saving state (such as EIP, and EFLAGS, see Col. 15, lines 36-41, or Col. 16, lines 38-42) of the computer system; switching the computer system to protected mode (VSM mode when VSM bit is set in EFLAGS, see Fig.

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2C; or VSM enable bit is set in VSM enable register 238 see Fig. 2E); executing 32-bit code (see Col. 9, line 63, regarding VSM addressing is a flat 32 bit model) that uses a global descriptor table (descriptor 402, see Fig. 4) that is different from the global descriptor table in use when the system management mode interrupt occurred (note the descriptor 402, see Fig. 4, will be different when referring to different segments at the different state of the Wooten'299's system before and after interrupt occurrence); and upon completion of the execution of the 32-bit code, restoring (see Col. 18, lines 27-37, regarding restoring the EIP register and the EFLAGS register) the saved state of the computer system; and returning (by IRET instruction, see Col. 18, lines 33-37) restoring from the occurrence of the interrupt.

As to claim 2, Wooten'299 also discloses: the 32-bit code is an operating system kernel for loading and running programs (since in the Wooten'299's system, the operating system kernel certainly comprises programs for an interrupt handling; and loading and running are the certain operations therein) during the occurrence of the system management mode interrupt.

As to claim 3, Wooten'299 also discloses: the programs are Windows NT Portable Executable programs (since Windows NT operating system is intended to be used in the Wooten'299's system).

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As to claim 4, Wooten'299 also discloses: the computer system is based on an Intel Pentium processor (as indicated in Col. 4, lines 29-30).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Novak et al.'567 discloses apparatus and method for native mode processing in a RISC-based CISC processor. The interrupt detection and enable logic 229 controls a return operation RET for returning from a routine executing in native mode to a program code executing in a CISC-instruction operating mode. In an embodiment in which native mode execution is activated using a FAR CALL instruction, a return RET instruction for returning from the FAR CALL causes the interrupt detection and enable logic 229 to terminate native mode execution, resetting any control signals used for native mode operation and adjusting the effective instruction pointer (EIP).

Wooten'755 discloses a processor with virtual system mode. In VSM, the processor can utilize the VSM addressing mechanism and the mode of operation prior to entering VSM. Transitions from the user modes to virtual system mode can be made by

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indirect calls through a call gate or through vectored entries. While in VSM the processor can utilize VSM memory and I/O space modes, but can also directly utilize the I/O space and memory of the user mode present prior to entry into VSM by using a segment override. Upon exiting VSM, any processor registers that were saved are restored so the user mode operation can continue as if the emulation operation were performed by the normal interrupt service routine.

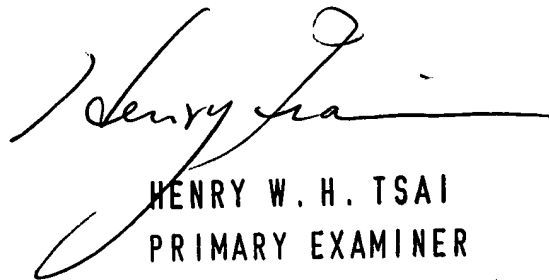
Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (571) 272-4176. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (571) 272-4162. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC central telephone number, 571-272-2100.

7. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions

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directly into the Group at fax number: 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



HENRY W. H. TSAI
PRIMARY EXAMINER

April 18, 2005